

Work Order ID 128218

Tuesday, January 13, 2015 1:25:56 PM

128218

Page 1

Item ID: D3234-1 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Doubler
Start Date: 1/13/2015 Start Qty: 8.00 ***8*** Cust Item ID:
Required Date: 1/20/2015 Req'd Qty: 8.00 ***8*** Customer:
Reference:

Approvals: Process Plan: MLS Date: 1501-13 Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3234	C								

100

100

Waterjet

FLOW CNC Waterjet

2024.080

FLOW WATER JET

Memo

1-Cut as per Dwg

Dwg Rev: C

Prog Rev: C

2-Deburr if necessary

0.00

0.00

9 0 Jm15-1-22

110

110

QC

Quality Control

QC2- Inspect parts off machine FAI/FAIB

Memo

0.00

0.00

9 0 Jm15-1-22

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	General		
☐ Bending	☐ Bend	☐ Folio/Program	☐ Outside Dimensions
☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance
☐ Cracks	☐ Broken/Damage/Defect	☐ Hardware	☐ Part Incorrect
☐ Crimp/Kink/Ripple/Wave	☐ Burrs	☐ Inspection Incomplete/Unqualified	☐ Part Lost/Missing
☐ Cuffs	☐ Contamination	☐ Instructions Incomplete/Unclear	☐ Part Moved
☐ Crushing	☐ Countersink	☐ Misaligned/off center	☐ Positioned Wrong
☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Power Loss/Surge
☐ Inspection Strip in Tube	☐ Drawing	☐ Misread	☐ Pressure/Forced
☐ Marks/Chatter	☐ Drill Holes	☐ Off-set	☐ Set-up
☐ Turning Sequence	☐ Finish	☐ Out of Calibration	☐ Temperature/Cure
☐ Wave/Twist in Tube	☐ Fit/Function	☐ Out of Sequence	☐ Weld
			☐ Wrong Stock Pulled
			☐ Other

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Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	Identify as per dwg & Stock Location: <u>St 486</u>	0.00							
150									
Packaging	Memo	0.00				9			
Packaging									
160	QC21- Final Inspection - Work Order Release	0.00							
160									
QC	Memo	0.00				MCS			15-03-12
Quality Control									

15-3-12

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Design									
Doc/Data									
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FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other _____ _____ _____ _____
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Picklist Print

Tuesday, January 13, 2015 1:25:59 PM

Page 1

Work Order ID: 128218

128218

Parent Item: D3234-1

D3234-1

Parent Item Name: Doubler

Start Date: 1/13/2015

Required Date: 1/20/2015

Start Qty: 8.00

Required Qty: 8.00

Comments: IPP Rev:A New Issue 08-08-14 JLM Verified By:EC
IPP Rev:B 08-12-18 as per ECN08-582 DD verified by:EC IPP REV:C
11.11.24 AS PER ECN11-674 DD VERF:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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M2024T3S.080

Purchased

No

100

sf

203.5000

0.58

5

M2024T3S 080

**

2024-T3 .080 sheet

Jm 15-1-22

Location

Loc Qty

Loc Code

MAT021

203.5

M127668

10.5

M129584

25

M129891

168

129891

DQA: _____ Date: _____



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FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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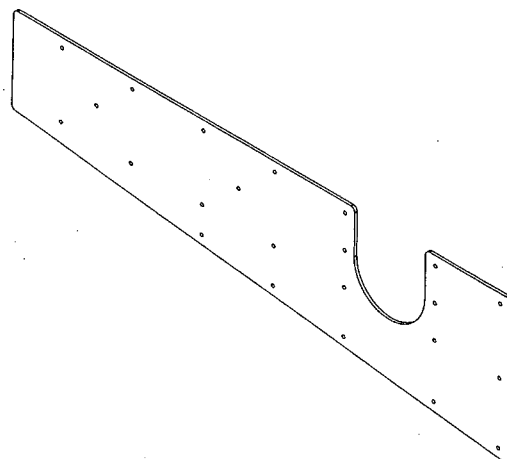
DART AEROSPACE LTD		Work Order:	128218
Description: Doubler		Part Number:	D3234-1
Inspection Dwg: D3234 Rev: C		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

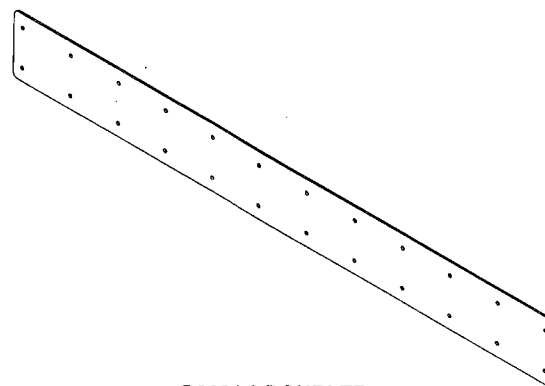
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.098	+0.004/-0.001	0.100"	-		✓	Jkm01
0.285	+/-0.010	0.286"	-		✓	
1.295	+/-0.010	1.297"	-		✓	
2.305	+/-0.010	2.305"	-		✓	
2.700	+/-0.010	2.700"	-		✓	
4.505	+/-0.010	4.505"	-		✓	
1.33	+/-0.030	1.33"	-		✓	
1.523	+/-0.010	1.523"	-		✓	
2.641	+/-0.010	2.641"	-		✓	
3.758	+/-0.010	3.758"	-		✓	
5.993	+/-0.010	5.998"	-		✓	
7.111	+/-0.010	7.111"	-		✓	
8.228	+/-0.010	8.228"	-		✓	Jkm06
10.463	+/-0.010	10.463"	-		✓	
10.77	+/-0.030	10.77"	-		✓	
2.25	+/-0.030	2.25"	-		✓	
13.333	+/-0.010	13.333"	-		T	Jkm07
15.366	+/-0.010	15.366"	-		T	
15.665	+/-0.010	15.665"	-		T	
0.080	+/-0.010	0.079"	-		✓	

Measured by:	Jm	Audited by:	DAS 38 9-89	Preliminary Approval:	
Date:	15-1-22	Date:	JAN 22 2015	Date:	

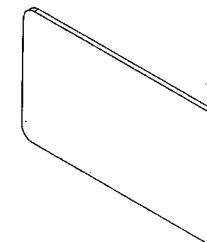
Rev	Date	Change	Revised by	Approved
A	08.09.04	New Issue	KJ/DD	
B	09.05.04	Dimensions update per Rev B	KJ/DD	
C	12.02.01	Dimensions update per Rev C	KJ	



D3234-1 DOUBLER



D3234-3 DOUBLER



D3234-5 SPACER

NOTES:

1) MATERIAL: -1: 2024-T3 ALUMINUM SHEET, 0.080 THICK
PER AMS-QQ-A-250/4 OR AMS 4037
REF DART SPEC M2024T3S.080

-3: 2024-T3 ALUMINUM SHEET, 0.050 THICK
PER AMS-QQ-A-250/4 OR AMS 4037
REF DART SPEC M2024T3S.050

-5: 5052-H32 ALUMINUM SHEET, 0.050 THICK
PER AMS-QQ-A-250/8 OR AMS 4016
REF DART SPEC M5052H32S.050

- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY PER DART QSI 044 6.1
7) WEIGHT: -1: 0.41 lbs
-3: 0.15 lbs
-5: 0.01 lbs

RELEASED
2011-11-23

C	RE-DESIGNED D3234-1 TO FIT D3025-1 REV. B. ZONE C3-2, 4.505 WAS 5.347, ZONE D8-2, 2.700 WAS 2.841. REASON: REF PAR 11-118.	BC	11.09.29
B	REDRAWN IN SOLIDWORKS TO CURRENT DESIGN STANDARDS. PARTS FULLY DIMENSIONED. NO PHYSICAL CHANGES MADE TO PARTS. REASON: REF PAR 08-029.	AJS	08.11.24
A	NEW ISSUE	CP	03.11.19
REV.	DESCRIPTION	BY	DATE
DESIGN	BC	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	BC		
CHECKED	BC	DRAWING NO.	REV. C
MFG. APPR.	BC	D3234	SHEET 1 OF 2
APPROVED	BC	TITLE	SCALE
DE APPR.	BC	DOUBLER	NTS
DATE	11.09.29	COPYRIGHT © 2003 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

